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Please respond to ellen_mcentee@mk.com

To: Bonita Lavelle/EPR/R8/USEPA/US@EPA, marta_valentine@mk.com
cc: marta_valentine@mk.com
Subject: Vegetable MDLs
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I spoke with Columbia Analytical Services regarding their MDLs in tissue samples and they are comfortable that they can see down to 0.05 ppm (dry wt) in a vegetable sample. Their basis for this is that interferences in vegetables when digested and analyzed by ICP-MS are not a concern. Their biggest concern is carrying the arsenic through the entire procedure and previous matrix spike data has indicated they are capable of this.

Columbia's experience with biological tissues is quite extensive. They have approximately 8 years of experience using ICP-MS for analysis of vegetables, fruits, berries, and marine type tissues. They have performed MDL studies on marine-type tissues; however, this data is outdated and no longer available.

Page 4 of their MDL study should the calculated MDL and the reported MDL. Their calculated MDL is 0.104 ppm while their reported MDL is 0.2 ppm (in water). Converting the MDL to tissue would put the MDL closer to 0.02 ppm than 0.04 ppm.

Most labs do not perform matrix specific MDLs due to the wide range of samples they receive. We can have Columbia perform an MDL study specific to this project but we would need to find a suitable sample. Marta and I were discussing this yesterday and we could send the samples and have the lab start analyzing them. As results become available, we could choose a sample suitable for the MDL study and have them run it at that time. We would need to discuss which type of vegetable might be representative.

It doesn't look like samples will be sent today. We can discuss this further on Monday. Thanks.